

REMARKS

In the present response, claims 1-3, 8, and 15 have been amended, and claims 16-17 have been added. Therefore, claims 1-17 are presently pending. Further examination and reconsideration of the presently claimed application are respectfully requested.

Allowable Subject Matter

Claims 3-7 and 9-14 were deemed allowed in their present form. Applicants appreciate the Examiner's indication of allowable subject matter. For reasons set forth below, Applicants believe the remaining claims are also allowable over the cited art.

Objections to the Specification

An objection was lodged against the specification as failing to provide proper antecedent basis for claimed subject matter. Specifically, claims 3 and 15 were objected to for containing the language "or collector system." In response thereto, this phrase has been deleted from claims 3 and 15. Accordingly, Applicants respectfully request removal of this objection.

Section 112 Rejection

Claims 1, 8, and 15 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response thereto, claims 1, 8, and 15 have been amended in a manner believed to address the concerns listed in the Office Action. Accordingly, Applicants respectfully request removal of this rejection.

Section 102 Rejection

Claim 15 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,002,374 to Jacobs (hereinafter "Jacobs"). Although Jacobs was listed as the anticipatory reference, it is believed that the Examiner may have erred when referencing Jacobs, and should have referenced possibly U.S. Patent No. 1,982,528 to Mennesson ("hereinafter "Mennesson"). The Examiner describes Jacobs as having three figures (Figs. 1-3); however, Jacobs has only two figures. In addition, the figures in Jacobs do not describe a pneumatic sensor with reference numerals 2, 3, and 10, as set forth in the Office Action. Accordingly, Applicants' remarks are directed to Mennesson, not Jacobs.

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The standard for "anticipation" is one of fairly strict identity. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art of reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP 2131. Furthermore, anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, as arranged in the claim. *W.L. Gore & Assocs. V. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). Using these standards, Applicant submit the cited art fails to disclose each and every element of the currently pending claims, some distinctive features of which are set forth in more detail below.

Mennesson does not disclose a method for determining the length of at least one contact brush in a sliding contact track system. Present independent claim 15 recites in the preamble a particular methodology for determining the length of a contact brush, that contact brush being present in a sliding contact track system. There is no mention in Mennesson of a contact brush, much less a contact brush in a sliding contact track system as set forth in present claim 15. Instead, Mennesson makes ~~clear~~ reference to measuring orifices or the distance between a pair of surfaces (Mennesson -- col. 1, lines 1-5; col. 2, lines 87-90; col. 2, line 104 - col. 3, line 3). Measuring distances between surfaces or the opening of an orifice is nowhere suggested in Mennesson as being the equivalent of (nor could Mennesson ~~make~~ such a suggestion) the presently claimed determination of the length of a contact brush within a sliding contact track system.

Mennesson does not disclose feeding a gas into a pneumatic sensor which is integrated into a brush holder. Present independent claim 15 recites as its first element the step of feeding a gas into a pneumatic sensor that is integrated into a brush holder. If Mennesson is used to measure an orifice size, the only mechanism used in Mennesson is to feed the gas into a tank having tubes 2 and 3 arranged therein (Mennesson -- Fig. 1). Tubes 2 and 3 are arranged at varying depths so as to apply a variable pressure between tubes 2 and 3 (Mennesson -- col. 2, lines 68-71). A manometer 10 can be connected to supply constant pressure to tube 1 by measuring the pressure in the chamber between valve 7 and nipple 9 (Mennesson -- col. 1, lines 45-54). While gas is fed into tubes 2 and 3 that are displaced within the tank, nowhere in Mennesson is there a suggestion that gas can be fed into a manometer, specifically a manometer which operates as a sensor that is also integrated into a brush holder. Nowhere in Mennesson is there any suggestion that manometer 10 is integrated into a brush holder. To do so would destroy the intent of the manometer in Mennesson, which is to maintain atmospheric pressure at the upper surface of manometer 10. If integrated into a brush holder, manometer 10 would be rendered inoperable. If operating as a mechanism for measuring the distance between a pair of surfaces, as set forth in Fig. 3, flexible hose 15 must be connected to a manometer (Mennesson -- col. 2, lines 108-110). The embodiment of measuring a distance set forth in Fig. 3 of Mennesson requires that the manometer -- the

only mechanism that can operate as a sensor -- must be one that can measure gas pressure relative to atmospheric pressure and, thus, cannot be a mechanism that integrates a manometer within a brushless motor for the same reasons set forth above.

In light of the explicit and implicit deficiencies of Mennesson, Applicants assert that claim 2 is not anticipated by Mennesson. Accordingly, Applicants respectfully request removal of this rejection.

Section 103 Rejection

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Jacobs. Again, when reviewing the reference numerals and figures applied in the Office Action, it appears the Examiner meant to cite Mennesson rather than Jacobs. Under that assumption, Applicants respectfully traverse this rejection for many of the same reasons set forth above. To establish a case of *prima facie* obviousness of a claimed invention, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Second, there must be a reasonable expectation of success. As stated in MPEP 2143.01, the fact that references can be hypothetically combined or modified is not sufficient to establish a *prima facie* case of obviousness. See *In re Mills*, 916 F.2d. 680 (Fed. Cir. 1990). Finally, the prior art references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d. 981 (CCPA 1974); MPEP 2143.03. Specifically, "all words in a claim must be considered when judging the patentability of that claim against the prior art." *In re Wilson* 424 F.2d., 1382 (CCPA 1970). Using these standards, Applicants contend that the cited art fails to teach or suggest all features of the currently pending claims, some distinctive features of which are set forth in more detail below.

Mennesson does not teach or suggest producing pressurized air having a fluctuating air pressure. Present claim 2 sets forth in its first element the step of producing pressurized air having a fluctuating air pressure. Thus, air pressure is not simply fluctuating by happenstance or through some inherent outcome of what would normally occur when pressurized air is produced, but step 2 explicitly describes producing the fluctuating air pressure through positive and purposeful means. Instead of producing a fluctuating air pressure, Mennesson specifically requires that the "function of elements 1 to 6 inclusive is essentially to assure a supply of air under constant pressure." (Mennesson -- col. 1, line 55 - col. 2, line 3, emphasis added). Thus, not only does Mennesson require constant pressure, but specifically teaches away from producing fluctuating air pressure. As held by the U.S. Supreme Court in *U.S. v. Adams*, 383 US 39 (1966), teaching away from the art is a *per se* demonstration of lack of *prima facie* obviousness. Moreover, any attempts to modify Mennesson so that the air supply is no longer under constant pressure would change the principle of operation of Mennesson. As set forth in *In Re*

Ratti, 270 F.2d. 810 (CCPA 1959), if the proposed modification or combination of the prior art ~~would~~ change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.

Mennesson does not teach or suggest supplying pressurized air to a sliding contact brush. As described above, nowhere in Mennesson is there any mention of measuring the length of a sliding contact brush, and certainly there is no mention of supplying pressurized air to such brush as set forth in the second element of claim 2. Mennesson is simply void of any reference to a sliding contact brush, and to modify the apparatus of Mennesson to measuring distance of orifice size would be prohibited under *Re Ratti*, as well as MPEP 2143.01.

If the Examiner, by referencing numbers within Mennesson, somehow meant to reference Jacobs, Applicants respectfully request that the particular passages in Jacobs used against the present claims be described in a subsequent Office Action. Moreover, Applicants wish to point out that Jacobs does not teach producing a fluctuating air pressure. Instead, the intention of Jacobs is that the air pressure should be constant in order to get a constant reading at the pressure meter. If the pressure would somehow fluctuate, the indicator in Jacobs at the pressure meter would be moving quickly in making a precise readout impossible. Moreover, Jacobs suffers the same deficiencies of Mennesson in that Jacobs nowhere describes a sliding contact brush. Instead, Jacobs is limited to measuring wear indicator within a thrust bearing -- quite dissimilar from measuring the length of a sliding contact brush as in claim 2. Measuring a fluctuating air pressure of present claim 2 is needed to distinguish the measurement signal from static offset signals. This cannot be done by a mechanical pressure meter as in Jacobs. For this purpose, claim 2 recites an electronic signal evaluation step using, for example, an amplifier or evaluation circuit. Any fluctuations are dealt with by the amplifier or evaluation circuit, which are not present in the mechanical pressure meter of Jacobs, and are also not present in the manometer apparatus of Mennesson.

For at least the foregoing reasons, Applicants assert that claim 2 is patentable over the cited art. Accordingly, Applicants respectfully request removal of this rejection.

Information Disclosure Statement

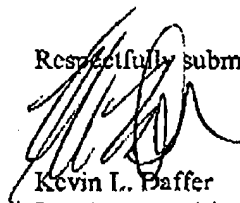
Mailed on this day under separate cover is an Information Disclosure Statement listing the references set forth in the present specification. Applicants request that the references cited therein be considered by the Examiner.

CONCLUSION

The present response is believed to be a complete response to the issues raised in the Office Action mailed December 15, 2005. In view of the remarks traversing the rejections, Applicants ~~assert~~ that pending claims 1-17 are in condition for allowance. If the Examiner has any questions, comments, or suggestions, the undersigned respectfully requests a telephone conference.

The Commissioner is authorized to charge the required fee or credit any overpayment, to ~~Daffer~~ McDaniel, LLP Deposit Account No. 50-3268/5858-02300.

Respectfully submitted,



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